

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 124)

FOIL the expressions shown below:

1. $(-9x - 3)(4x + 3)$

$$\begin{aligned} &(-9)(4)x^2 + (-9)(3)x + (-3)(4)x + (-3)(3) \\ &(-36)x^2 + (-27)x + (-12)x + (-9) \\ &-36x^2 - 39x - 9 \end{aligned}$$

2. $(-6x + 8)(4x - 9)$

$$\begin{aligned} &(-6)(4)x^2 + (-6)(-9)x + (8)(4)x + (8)(-9) \\ &(-24)x^2 + (54)x + (32)x + (-72) \\ &-24x^2 + 86x - 72 \end{aligned}$$

3. $(-4x - 8)(2x - 8)$

$$\begin{aligned} &(-4)(2)x^2 + (-4)(-8)x + (-8)(2)x + (-8)(-8) \\ &(-8)x^2 + (32)x + (-16)x + (64) \\ &-8x^2 + 16x + 64 \end{aligned}$$

4. $(4x + 7)(3x - 2)$

$$\begin{aligned} &(4)(3)x^2 + (4)(-2)x + (7)(3)x + (7)(-2) \\ &(12)x^2 + (-8)x + (21)x + (-14) \\ &12x^2 + 13x - 14 \end{aligned}$$

5. $(-4x - 6)(7x - 9)$

$$\begin{aligned} &(-4)(7)x^2 + (-4)(-9)x + (-6)(7)x + (-6)(-9) \\ &(-28)x^2 + (36)x + (-42)x + (54) \\ &-28x^2 - 6x + 54 \end{aligned}$$

FOIL the expressions shown below:

6. $(-9x + 8)(-6x - 7)$

$$\begin{aligned} &(-9)(-6)x^2 + (-9)(-7)x + (8)(-6)x + (8)(-7) \\ &(54)x^2 + (63)x + (-48)x + (-56) \\ &54x^2 + 15x - 56 \end{aligned}$$

7. $(-7x - 8)(9x - 9)$

$$\begin{aligned} &(-7)(9)x^2 + (-7)(-9)x + (-8)(9)x + (-8)(-9) \\ &(-63)x^2 + (63)x + (-72)x + (72) \\ &-63x^2 - 9x + 72 \end{aligned}$$

8. $(2x + 9)(7x - 7)$

$$\begin{aligned} &(2)(7)x^2 + (2)(-7)x + (9)(7)x + (9)(-7) \\ &(14)x^2 + (-14)x + (63)x + (-63) \\ &14x^2 + 49x - 63 \end{aligned}$$

9. $(5x + 7)(5x + 2)$

$$\begin{aligned} &(5)(5)x^2 + (5)(2)x + (7)(5)x + (7)(2) \\ &(25)x^2 + (10)x + (35)x + (14) \\ &25x^2 + 45x + 14 \end{aligned}$$

10. $(-8x + 6)(-4x + 4)$

$$\begin{aligned} &(-8)(-4)x^2 + (-8)(4)x + (6)(-4)x + (6)(4) \\ &(32)x^2 + (-32)x + (-24)x + (24) \\ &32x^2 - 56x + 24 \end{aligned}$$